

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

# PATENT ABSTRACTS OF JAPAN

(11) Publication number : 03-089165

(43) Date of publication of application : 15.04.1991

(51) Int.CI. G01N 33/535

(21) Application number : 01-225524 (71) Applicant : MEIDENSHA CORP

(22) Date of filing : 31.08.1989 (72) Inventor : YOKOYAMA KAZUE  
AOYANAGI SHIGEO  
KUSUMI MIYOKO  
MATSUYUKI AKIRA

## (54) REAGENT FOR MEASUREMENT OF ENZYME IMMUNITY AND PREPARATION THEREOF

### (57) Abstract:

PURPOSE: To improve the measuring sensitivity and reproducibility by making  $\beta$ -D-galactosidase (B-D-gal) as an enzyme marker and bonding three molecules of an antigen or antibody to one molecule of the enzyme marker thereby to obtain a reagent for enzyme immunity measurement.

CONSTITUTION: B-D-gal is an enzyme originated from colibacillus, having the molecular weight of 500,000 and showing superior stability when used as an antibody marker. An antibody obtained, for example, by immunizing an animal against an antigen, or a fragment having the antigen avidity and obtained by making a protein lytic enzyme act to the above antibody may be usable as an antibody to mark an enzyme. A bridging agent having maleimide group is employable when the B-D-gal is to be marked to an antibody. If an enzyme marker antibody obtained by bonding three molecules of antibodies with one molecule of the B-D-gal with using the B-D-gal as a marker enzyme

is prepared to be a suitable concentration to a buffer solution of pH2.8 and used for the enzyme immunity measurement, the enzyme markers of a proper number of antibodies is used as a reagent and therefore, it becomes easy to detect an object to be detected.

#### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]